











Energy Project Incentive Funds What, Why, and How?

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Overview



- Incentive funds to leverage energy projects are rampant in U.S., now available in 90% of states
 - Program types range from standard EE rebates to incentives for new construction and re-commissioning
- Growth has been strong and expected to continue
 - \$3B → \$6B in last three years for EE alone
 - EE figure may double again to \$12B by 2020
 - Driver: cost-effectiveness
- Federal facilities can accept these funds
 - And keep them, too or at least half
- FEMP makes it easy to see what's available to you

EE Program Offerings



- Most common: rebates for EE equipment
 - AKA "prescriptive" measures
- "Custom" incentives
 - Non-standard equipment
 - whole building approaches
- Design assistance (e.g., for new construction)
- No- or low-cost energy audits
- Re-/retro-Commissioning
- Incentives for performance contractors
- Load management programs (kW reduction)



Renewable Energy Incentives



- Most common: rebates for on-site solar PV
 - Up-front or performance-based
- Other technologies include:
 - wind, geothermal
 - small hydro, biomass
- Other incentives:
 - RECs can provide dramatic buy-down
 - Tax credits can be leveraged by federal agencies using outside ownership (PPAs, etc.)



EE Funding – Current Picture



- ~ 45 states have ratepayer-funded EE
- 2011 budget (EE only) ~ \$6B (source: CEE, LBNL)
 - Double the \$3.1B in 2008; 1998 figure was \$0.8B
 - ~ 75-80% on electric side; ~20-25% for gas programs
- 2009 LBL study ID'd ~ 15 leaders, spending 1%+ of revenues from electric sales
 - Grade inflation (two years later): now there's 21
- Projection was that EE spending would reach \$7.5B (mid-estimate) to \$12.4B (high) by 2020
 - We're already 80% to mid-estimate
 - So much change that study's being repeated

Trends



- Growth, especially in the long term
- Even SE states, traditional laggards, getting in act
 - TVA set ambitious savings goals for 2020
- MA and RI passed "least cost procurement" legislation
 - I.e., efficiency should be driven until marginal cost of avoided kWh = marginal cost of generating kWh
- PA went from "0 to 60" in 2010
 - Driver: Act 129 kWh and kW targets for utilities
- Caveat: A few states moving EE funds to general coffers or proposing reduced budgets

Why the generosity?



- Ultimate driver: EE cheaper than new generation
 - EE programs, en masse, cost ~ 2-5¢/kWh and 30-60¢/therm avoided (source: ACEEE, others)
- And easier
 - No siting, permitting or transmission issues
- Proximate drivers
 - EE Portfolio Standards and mandatory savings targets (e.g., PA)
 - Statutory requirement that utilities acquire all costeffective EE (e.g., MA and RI)
 - Integrated Resource Plans (IRP) and Demand Side Management (DSM) plans required by PUCs
 - Renewable Energy Portfolio Standards

Enabling Legislation



Yes, federal agencies may use these funds

Energy Policy Act of 1992:

- "Agencies are authorized and encouraged to participate in programs to increase energy efficiency and for water conservation or the management of electricity demand conducted by gas, water, or electric utilities and generally available to customers of such utilities."
- "Each agency may accept financial incentives, goods, or services generally available from any such utility to increase energy efficiency or to conserve water or manage electricity demand."

Eligible Funding Sources



EPACT 1992 language specifies "utilities"

- Does this mean incentive funds from other sources (e.g., state agencies or 3rd-party administrators) can't be accepted?
- FEMP interprets EPACT language to be inclusive because it was written prior to the existence of non-utility providers
 - Remember: "...generally available to customers of such utilities"
- However, attorneys at two DoD agencies have argued otherwise

Accepting Payment



Many federal facilities have difficulty accepting checks

- Work-around #1: Assign payment directly to contractor
 - Most incentive programs make this easy
- Work-around #2: Have incentive applied to utility account and receive credit
 - Obviously more difficult with non-utility providers

Retaining Funds



This is sticky issue for civilian agencies

- NECPA used to I.D. 50/50 split with Treasury
 - Language was repealed by EISA ... but not replaced!
- NASA legal has pointed to mid-'90s civilian agency appropriation bill that also calls out 50/50 split

What is available for my facility?



- FEMP provides clickable map with annotated listing of all programs open to federal facilities in all 50 states and DC:
 - www1.eere.energy.gov/femp/financing/energyincentivep rograms.html
 - or just navigate through "Project Funding" tab of FEMP website
- Similar to DSIRE (Database of State Incentives for Renewables and Efficiency):
 - But FEMP site focuses strictly on programs for feds;
 excludes residential programs
 - FEMP site also includes DR programs

Energy Incentive Programs



www1.eere.energy.gov/femp/financing/energyincentiveprograms.html



Legend

- These states budgeted over 2% of electric revenues for electric energy efficiency programs in 2010
- These states budgeted between 1% and 2% of electric revenues for electric energy efficiency programs in 2010
- These states budgeted between 0.5% and 1% of electric revenues for electric energy efficiency programs in 2010
 - These states budgeted less than 0.5% of electric revenues for electric energy efficiency programs in 2010 or did not provide data
- These states have distributed generation (including renewables) programs available
- 🗮 | These states have gas programs

Sample program description



Typical Program Description (underlined = links to programs)

- Idaho Power sponsors the **Energy Efficiency for Business** initiative. Three programs of interest to federal facilities:
 - The <u>Easy Upgrades for Simple Retrofits</u> program offers incentives of up to \$100,000 per site per year for qualifying energy-saving projects ...
 - The <u>Custom Efficiency for Complex Projects</u> program provides large commercial and industrial customers financial incentives based on \$0.12/kWh savings, up to 70 percent of the project cost ...

Summary



- Many opportunities available FEMP is here to help
- FEMP energy incentives map:

www1.eere.energy.gov/femp/financing/energyincentiveprograms.html

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